



## **DEPARTMENT OF COMMERCE**

### **National Oceanic and Atmospheric Administration**

#### **50 CFR Part 660**

**[RTID 0648-XC971]**

### **Magnuson-Stevens Act Provisions; Fisheries Off West Coast States; Pacific Coast Groundfish Fishery Management Plan; Amendment 31**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of availability of proposed fishery management plan amendment; request for comments.

**SUMMARY:** NMFS announces that the Pacific Fishery Management Council has submitted Amendment 31 to the Pacific Coast Groundfish Fishery Management Plan to the Secretary of Commerce for review. If approved, Amendment 31 would define stocks that are in need of conservation and management, consistent with the provisions and guidelines of the Magnuson-Stevens Fishery Conservation and Management Act. Amendment 31 would define stocks for 14 species within the fishery management unit. These species were prioritized because they had stock assessments in 2021 or will have assessments in 2023. Amendment 31 is necessary for NMFS to make stock status determinations, which in turn will help prevent overfishing, rebuild overfished stocks, and achieve optimum yield. Amendment 31 is administrative in nature and does not change harvest levels or timing and location of fishing, nor does it revise the goals and objectives or the management frameworks of the Pacific Coast Groundfish Fishery Management Plan.

**DATES:** Comments on Amendment 31 must be received no later than October 22, 2023.

**ADDRESSES:** You may submit comments on this document, identified by NOAA-NMFS-2023-0066, by the following method:

- *Electronic Submission:* Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to <https://www.regulations.gov> and enter NOAA-NMFS-2023-0066 in the Search box. Click the “Comment” icon, complete the required fields, and enter or attach your comments.

*Instructions:* Comments must be submitted by the above method to ensure that the comments are received, documented, and considered by NMFS. Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered. All comments received are a part of the public record and NMFS will post for public viewing on <https://www.regulations.gov> without change. All personal identifying information (*e.g.*, name, address, *etc.*), confidential business information, or otherwise sensitive information submitted voluntarily by the sender is publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

### **Electronic Access**

This rule is accessible via the Internet at the Office of the Federal Register Web site at <https://www.federalregister.gov>. Background information and documents including an analysis for this action (Analysis), which addresses the statutory requirements of the Magnuson Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) are available from the Pacific Fishery Management Council’s Web site at <https://www.pcouncil.org>.

**FOR FURTHER INFORMATION CONTACT:** Gretchen Hanshew, Fishery Management Specialist, at 206-526-6147 or [gretchen.hanshew@noaa.gov](mailto:gretchen.hanshew@noaa.gov).

**SUPPLEMENTARY INFORMATION:** NMFS manages the groundfish fisheries in the exclusive economic zone (EEZ) seaward of Washington, Oregon, and California under

the Pacific Coast Groundfish fishery management plan (PCGFMP). The Council prepared and NMFS implemented the PCGFMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), 16 U.S.C. 1801 *et seq.* and by regulations at 50 CFR parts 600 and 660. The Magnuson-Stevens Act requires that each regional fishery management council submit any fishery management plan (FMP) or plan amendment it prepares to NMFS for review and approval, disapproval, or partial approval by the Secretary of Commerce. The Magnuson-Stevens Act also requires that NMFS, upon receiving an FMP or amendment, immediately publish a notification that the FMP or amendment is available for public review and comment. This notice of availability announces that the proposed Amendment 31 to the FMP is available for public review and comment. NMFS will consider the public comments received during the comment period described above in determining whether to approve, partially approve, or disapprove Amendment 31 to the FMP.

## **Background**

Amendment 31 would define stocks that are in need of conservation and management. Amendment 31 would define stocks for 14 species within the fishery management unit (FMU; the jurisdiction of the FMP from 3-200 nautical miles offshore between the U.S. border with Canada and the U.S. border with Mexico, which may also be referred to as “coastwide”).

At its June 20-27, 2023 meeting in Vancouver, Washington, the Council recommended stock definitions for 14 species of Pacific Coast groundfish after NMFS was unable to make stock status determinations in 2021. NMFS was unable to make stock status determinations because the “stocks” for which the Council was expecting status determinations did not exist in the FMP. Currently, the FMP has a list of 80+ species to which it pertains, and does not describe whether each species is a single stock within the fishery management unit or if it is multiple (*e.g.*, regional) stocks.

NMFS requested that the Council undertake Amendment 31 to define stocks at its March 8-14, 2022 meeting in San Jose, California. NMFS advised the Council that it should define the stocks for which stock status determinations were changing in 2021 and 2023, and to add those definitions to the FMP. In particular, NMFS was seeking clarifications on whether species should have overfished (or not overfished) and subject to overfishing (or not subject to overfishing) status determinations on a scale that is less than coastwide.

The Council prioritized a sub-set of species, because there are 80+ species managed by the FMP, be considered for stock identification in Amendment 31. These species are black, canary, copper, quillback, squarespot, vermilion, and vermilion/sunset rockfishes; Dover, petrale, and rex soles; lingcod, Pacific spiny dogfish, sablefish, and shortspine thornyhead. These species were prioritized because they were subject to stock assessments in 2021 or are subject to stock assessments in 2023, and were therefore the most likely candidates to be the subject of NMFS' forthcoming status determinations, which are often based on new assessments.

Early in the development of Amendment 31, the Council was advised by the Scientific and Statistical Committee (SSC) that indications of population structure within a species should be an indicator of whether stock status should be determined at a finer scale than coastwide. The Council evaluated a literature review of the best scientific and biological information available for each species, which is appended to the main analytical document (Analysis) developed for Amendment 31, available on the Council website (see **Electronic Access**).

The Analysis considered alternative stock definitions for each species where applicable, as some species only had one stock definition alternative, as explained below. Generally, species with no known population structure, based on the literature review, or with known population structure based on genetic information, were considered under a

single stock definition alternative. The rest of the species had known indicators of population structure but were lacking or had conflicting genetic indicators of latitudinal variation and were therefore considered under multiple stock definition alternatives. For species with multiple alternatives, the Analysis assumed each alternative stock definition was adopted, then applied the FMP's harvest specifications framework to each stock to assess some of the biological, socioeconomic, and fishery management trade-offs that might be expected from implementation of future management actions based on the alternative stock definitions. Impacts of these stock definitions are expected to flow from future, subsequent action(s) to set harvest specifications and management measures for the stock(s) but the Analysis provided information for the Council to consider in making its decision. The Council considered these tradeoffs when making its final stock definition recommendations at its June 20-27, 2023 meeting. The following narrative provides species-specific information, in alphabetical order by common name, and rationale for the stock definition for each species that would be implemented by Amendment 31.

**Black rockfish (*Sebastes melanops*)**

Black rockfish range from Southern California to the Aleutian Islands in Alaska and occur most commonly north of San Francisco, California. Black rockfish are an important target species in Pacific Coast tribal fisheries off the coast of Washington State and in non-tribal commercial and recreational fisheries predominantly north of San Francisco, California. While overall population structure remains poorly understood, there are some indications that the species may have distinct geospatial population structure. Genetic work has indicated three, or perhaps more, populations within the species' range, and larval dispersal and adult movement are limited, to varying degrees, along the coast. All black rockfish assessments (1999 through 2023) have been assessed with multiple, area-specific, models within the FMU due to management considerations

and differences in exploitation history. The Council has calculated harvest specifications and managed black rockfish as three state-specific populations since 2017 and defining three stocks of black rockfish is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. This geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve three stocks of black rockfish in the FMP.

### **Canary rockfish (*Sebastes pinniger*)**

Canary rockfish are distributed along the northeastern Pacific coast, and the species is most abundant from British Columbia to central California. Canary rockfish are mostly harvested in sectors of the commercial and recreational non-tribal fisheries within the FMU. While population structure remains poorly understood, there are no known indications that the species has distinct geospatial population structure. The species has been assessed as a single geographic unit within the FMU since its first assessment in 1994, including throughout the period where it was managed under a rebuilding plan (2001-2014). The harvest specifications that are compared to mortality estimates to assess whether the species is subject to overfishing (currently overfishing limits [OFLs] and before 2005 called acceptable biological catches, or ABCs), have been set at a coastwide level throughout the period the species was managed under a rebuilding plan and in its current rebuilt status (2015-present). The Council cooperatively manages this species at a coastwide scale, with allocative sharing agreements between states and fishery sectors decided every 2 years through the harvest specifications and management measures biennial process. Defining canary rockfish as a stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial

cycle compared to 2023, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as only a single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of canary rockfish in the FMP.

### **Copper rockfish (*Sebastes caurinus*)**

Copper rockfish are distributed from Mexico to Alaska. Within the FMU, copper rockfish are predominantly harvested in recreational fisheries, but are also harvested in nearshore commercial fisheries to varying degrees along the coast. While population structure remains poorly understood, there are some indications that the species may have distinct geospatial population structure. Multiple studies have found genetic differentiation within the species' distribution, likely due to some level of isolation. Isolation could be a result of lack of larval dispersal or adult movement, patchiness of their preferred rocky habitat along parts of the coast, or other factors. Copper rockfish have been managed for years at a less than coastwide scale, and was assessed in 2021 and 2023 using models at a less than coastwide scale. The geographic stratification of the assessment areas is primarily driven by differences in current and historical harvest intensity. There is no known scientific evidence that there is distinct population structure for copper rockfish between the two assessed areas of the coasts off of Washington and Oregon, or between the two assessed areas off the coast of California. A two stock delineation aligned with the Council's desire to keep the sub-division of management of a species to a minimum, while retaining a geographic delineation aligned with best scientific information available and consistent with past management decisions to manage the species as multiple units. Therefore, the Council recommended and NMFS is

proposing to approve two stocks of copper rockfish in the FMP, north and south of 42°00' N lat.

**Dover sole (*Microstomus pacificus*)**

Dover sole are distributed from the Bering Sea in Alaska to Baja California and are harvested in the groundfish fishery throughout the FMU, though mostly by the non-tribal bottom trawl fishery off Oregon and Washington. The population structure of Dover sole is largely unknown, though the limited information available does not indicate distinct geospatial population structure. The harvest specifications that are compared to mortality estimates to assess whether the species is subject to overfishing have been set at a coastwide scale, for over 30 years. Dover sole's single, coastwide annual catch limit (ACL) is formally allocated in the FMP between trawl and non-trawl fisheries. Defining Dover sole as a stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as only a single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of Dover sole in the FMP.

**Lingcod (*Ophiodon elongatus*)**

Lingcod are distributed along the eastern Pacific coast from Baja California to the Gulf of Alaska. Lingcod are harvested in tribal fisheries and all sectors of non-tribal commercial and recreational fisheries. There are known indications that the species has distinct geospatial population structure, including genetic studies and life history characteristics such as differences in growth, longevity, and size at maturity. Lingcod have been assessed and managed as northern and southern geographic units since 2005.



The Council manages this species at a less than coastwide scale, with allocative sharing agreements between states and fishery sectors decided every 2 years through the harvest specifications and management measures biennial process. Defining lingcod as a northern stock and a southern stock within the FMU is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at that scale. The only alternative the Council considered was a two-stock definition (lingcod north and lingcod south), as only this geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing two lingcod stocks in the FMP.

**Pacific spiny dogfish (*Squalus suckleyi*)**

Pacific spiny dogfish live from the Gulf of Alaska to Baja California, with the highest abundance off the coast of British Columbia and Washington State. There are known indications that the portions of the stock within the FMU has interaction with and overlaps with spiny dogfish observed off British Colombia. There are no known indications of geospatial population structure within the FMU. Pacific spiny dogfish have been assessed and managed as a coastwide population since it was first assessed in 2011. The OFLs have been set at a coastwide level since the species was removed from the Other Fish complex in 2015; prior to 2015, the species' OFLs contributed to the coastwide OFL for the Other Fish complex. Allocative sharing agreements between states and fishery sectors for spiny dogfish have not been necessary to date. Defining spiny dogfish as a stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as

only a single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing a single stock of spiny dogfish in the FMP.

**Petrale sole (*Eopsetta jordani*)**

Petrale sole are distributed along the northeastern Pacific coast from the Gulf of Alaska to northern Baja California and their abundance is predominantly distributed by depth rather than latitude, with known seasonal depth migration patterns. Most petrale sole harvest in the FMU come from commercial bottom trawl gear, and fisheries harvesting petrale sole exhibit spatial and seasonal patterns. Population structure along this species' range is poorly understood, but there are no known indications that the species has distinct geospatial population structure. At the recommendation of the stock assessment review panel of 2006, the species has been assessed as a single geographic unit within the fishery management unit since 2009, including throughout the period where it was managed under a rebuilding plan (2009-2014). Similar to canary rockfish, the harvest specifications to assess whether the species is subject to overfishing have been set at a coastwide level for over 30 years, including throughout the period the species was managed under a rebuilding plan. A large majority of the coastwide harvestable surplus is allocated to trawl fisheries, with the allocation being decided every 2 years through the biennial harvest specifications and management measures process. Defining petrale sole as a stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as only a single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific

information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of petrale sole in the FMP.

### **Quillback rockfish (*Sebastes maliger*)**

Quillback rockfish are distributed in the northeastern Pacific Ocean from Southern California to the Gulf of Alaska. Within the FMU, Quillback rockfish are predominantly harvested in recreational fisheries, but are also harvested in nearshore commercial fisheries to varying degrees along the coast. While population structure remains poorly understood, there are some indications that the species may have distinct geospatial population structure within the FMU. While there has been limited genetic work on this species, adults in multiple sites within the species range show high site fidelity with limited adult movement. There are known, albeit limited, differences in growth along the coast, and abundance trends are also estimated to differ regionally. Quillback rockfish have been managed for many years at a less than coastwide scale, and was assessed in 2021 using models at a less than coastwide scale. The geographic stratification of the assessment areas on a state-specific scale is primarily driven by differences in current and historical harvest intensity, but also aligns with the state-specific approaches to fishery management of nearshore species and is consistent with the best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve three state-specific stocks of quillback rockfish in the FMP (*i.e.*, Quillback Rockfish -Washington, Quillback Rockfish – Oregon, and Quillback Rockfish - California).

### **Rex sole (*Glyptocephalus zachirus*)**

Rex sole are distributed along the northeastern Pacific coast from Alaska to southern California. Rex sole are commonly caught in trawl fisheries within the FMU. While population structure remains poorly understood, there are no known indications that the species has distinct geospatial population structure. The species has been

assessed as a single geographic unit within the FMU since its first assessment in 2013. The OFLs for rex sole contribute to the Other Flatfish stock complex OFLs, which are compared to mortality estimates of all the species in the complex to assess whether the stock complex is subject to overfishing. Other Flatfish OFLs have been set at a coastwide level since at least 2005. The Other Flatfish complex, including rex sole, is managed by the Council at a coastwide scale and formal or informal sharing agreements between states or fishery sectors have been unnecessary to date. Defining rex sole as a stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as only a single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of rex sole in the FMP.

### **Sablefish (*Anoplopoma fimbria*)**

Sablefish are distributed along the northern Pacific coast from the coast of Japan, through the Bering Sea in Alaska, and south to the southern tip of Baja California. Sablefish is a highly attained and important commercial fishery component of both tribal and non-tribal West Coast groundfish fisheries. While population structure remains poorly understood, there are few known indications that the species has distinct geospatial population structure within the FMU. Research has indicated geospatially distinctive growth rates and different maximum sizes for this species within the FMU, however recruitment trends do not show the same geospatial differentiation. Sablefish within the FMU has been assessed as a single geographic unit and for over 30 years the harvest specifications to assess whether sablefish is subject to overfishing have been set

at a coastwide level. Sablefish are formally allocated in the FMP and the Council manages sablefish harvest at a less than coastwide scale, reflective of the geospatial differences in maximum size and regional fishery characteristics. The formal allocation is both geographic, north and south of 36° N lat., and also establishes sharing among user groups, including two different individual fishing quota fisheries and tribal fisheries. Defining sablefish as a stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as only a single geographic delineation clearly aligned well with past and recent harvest specifications and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of sablefish in the FMP. This action does not change the Council's ability to set multiple ACLs for sablefish and makes no changes to the formal sablefish allocation structure described in the FMP.

### **Shortspine thornyhead (*Sebastolobus alascanus*)**

Shortspine thornyhead are distributed in the waters of the northeastern Pacific coast from the Bering Sea to Baja California. Historically, shortspine thornyhead were mostly harvested in non-tribal fisheries with trawl gear, but since the mid-1990s, harvest of shortspine thornyhead with non-trawl gears like longlines have steadily increased. While population structure remains poorly understood, there are no known indications that the species has distinct geospatial population structure within the FMU. The species has been assessed as a single, coastwide stock throughout the FMU since 2005. For over 20 years the overfishing limits, which are compared to mortality estimates to assess whether shortspine thornyhead is subject to overfishing, have been set for a single geographic unit within the FMU. Shortspine thornyhead are formally allocated in the

FMP and the Council manages shortspine thornyhead at a less than coastwide scale, reflective of the differences in regional fishery characteristics. The formal allocation is both geographic, north and south of 34°27' N lat., and also establishes sharing among user groups, including allocations to the trawl individual fishing quota fishery. Defining shortspine thornyhead as a single stock at a coastwide scale is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term biological impacts if status is determined at a coastwide scale. The only alternative the Council considered was a coastwide stock definition, as only a single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of shortspine thornyhead in the FMP. This action does not change the Council's ability to set multiple ACLs for shortspine thornyhead and makes no changes to the formal shortspine thornyhead allocation structure described in the FMP.

### **Squarespot rockfish (*Sebastes hopkinsi*)**

Squarespot rockfish are distributed from southern Oregon to Mexico with their highest densities in southern California. Squarespot rockfish are not typically targeted due to their small size, but are caught in both commercial and recreational fisheries off the coast of California. While population structure remains poorly understood, there are no known indications that the species has distinct geospatial population structure (*e.g.*, that it is multiple stocks). The species was assessed for the first time in 2021 as a single stock, using all available data within the FMU. The resulting 2021 assessment was only informative of the portion of the population off the coast of California. The OFLs for squarespot rockfish contribute to the Shelf Rockfish stock complex OFLs, which are compared to mortality estimates of all the species in the complex combined to assess

whether the stock complex is subject to overfishing. Shelf Rockfish overfishing status has been assessed north and south of 40°10' N lat. (Cape Mendocino, in northern California) for over 30 years. However, squarespot rockfish contributes extremely small biomass to the complex harvest specifications north of 40°10' N lat. due to its relatively sparse distribution and historically minimal harvest in that region. The Shelf Rockfish complex both north and south of 40°10' N lat. is managed by the Council with allocative sharing agreements between fishery sectors decided every 2 years through the harvest specifications and management measures biennial process. Defining squarespot rockfish as a single stock within the FMU is not expected to trigger future allocative actions, increase management burden during the next biennial cycle compared to 2023-24, or result in short-term or long-term negative biological impacts if status is determined at a coastwide scale. A single geographic delineation clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available. Therefore, the Council recommended and NMFS is proposing to approve a single stock of squarespot rockfish in the FMP.

### **Vermilion rockfish (*Sebastes miniatus*)**

Vermilion rockfish are distributed in the waters of the northeastern Pacific from Alaska to Baja California, with highest abundance from central Oregon south into Mexico. Vermilion rockfish are harvested in all sectors of the commercial and recreational fisheries within the FMU. There are known indications that the species has distinct geospatial population structure, including low-average larval dispersal and high site fidelity in adults, which has led to genetic differentiation within the FMU. Vermilion rockfish throughout the FMU were originally considered a single species; however, in southern California it is found as part of a pair of cryptic species, vermilion rockfish and sunset rockfish. For this reason, this cryptic species pair are considered together in the areas of the coast where sunset rockfish is known to be more prevalent.

In the areas of the coast where sunset rockfish are not known to be present, the Council recommended and NMFS is proposing a single stock of vermilion rockfish in the area of the FMU north of 42° N lat. due to a lack of scientific evidence of distinct population structure off the coasts of Washington and Oregon. This geographic delineation for vermilion rockfish clearly aligned well with past and recent fishery management and policy decisions for the species as well as best scientific information available.

#### **Vermilion/sunset rockfish (*Sebastes miniatus* and *Sebastes crocotulus*)**

The primary biomass of sunset rockfish appears to be in the Southern California Bight, though their range does extend somewhat north of Point Conception, California to an unknown extent. The two species lack morphological distinctions and can only be differentiated with genetic testing. Therefore, they are treated in assessments and fishery management as a single cryptic species pair in the areas of the coast with known sunset rockfish presence. In the areas of the coast where sunset rockfish are present and contributing biomass to a vermilion/sunset rockfish cryptic species pair in the assessments and fisheries, the Council recommended and NMFS is proposing a single stock of vermilion/sunset rockfish in the area of the FMU south of 42° N lat. due to a lack of scientific evidence of distinct population structure off the coast of California and the uncertainty in the northern extent of the range of sunset rockfish. A single geographic delineation for vermilion/sunset rockfish clearly aligned well with past and recent fishery management and policy decisions for the cryptic species pair as well as best scientific information available.

#### **Summary**

The Council recommended defining 20 stocks for 14 species within the over 80 managed groundfish species within the FMU, as described in Table 1. The Council also



recognized the need for, and is scheduled to begin in 2023, a comprehensive effort to define all remaining groundfish species in the FMP.

**Table 1 -- Groundfish Stocks Within the Fishery Management Unit (FMU) of the Pacific Coast Groundfish FMP and Their Boundaries, as Proposed to be Amended Through Amendment 31**

Stock	Species Scientific Name	Stock Boundaries
<b>Elasmobranchs</b>		
Pacific Spiny Dogfish	<i>Squalus suckleyi</i>	Pacific West Coast FMU
<b>Roundfish</b>		
Lingcod <i>North</i>	<i>Ophiodon elongatus</i>	North of 40°10' N lat.
Lingcod <i>South</i>	<i>Ophiodon elongatus</i>	South of 40°10' N lat.
Sablefish	<i>Anoplopoma fimbria</i>	Pacific West Coast FMU
<b>Rockfish</b>		
Black Rockfish - <i>Washington</i>	<i>Sebastes melanops</i>	North of 46°16' N lat.
Black Rockfish - <i>Oregon</i>	<i>S. melanops</i>	46°16' N lat. to 42° N lat.
Black Rockfish - <i>California</i>	<i>S. melanops</i>	South of 42° N lat.
Canary Rockfish	<i>S. pinniger</i>	Pacific West Coast FMU
Copper Rockfish <i>North</i>	<i>S. caurinus</i>	North of 42° N lat.
Copper Rockfish <i>South</i>	<i>S. caurinus</i>	South 42° N lat.
Quillback Rockfish - <i>Washington</i>	<i>S. maliger</i>	North of 46°16' N lat.
Quillback Rockfish - <i>Oregon</i>	<i>S. maliger</i>	46°16' N lat. to 42° N lat.
Quillback Rockfish - <i>California</i>	<i>S. maliger</i>	South of 42° N lat.
Squarespot Rockfish	<i>S. hopkinsi</i>	Pacific West Coast FMU
Vermilion Rockfish	<i>S. miniatus</i>	North of 42° N lat.
Vermilion/Sunset Rockfish	<i>S. miniatus/S. crocotulus</i>	South 42° N lat.
Shortspine Thornyhead	<i>Sebastolobus alascanus</i>	Pacific West Coast FMU
<b>Flatfish</b>		
Dover Sole	<i>Microstomus pacificus</i>	Pacific West Coast FMU
Petrable Sole	<i>Eopsetta jordani</i>	Pacific West Coast FMU
Rex Sole	<i>Glyptocephalus zachirus</i>	Pacific West Coast FMU

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: August 17, 2023.

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Kelly Denit,  
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 National Marine Fisheries Service.

